

REMARKS

The Office Action of October 17, 2006 has been carefully reviewed and these remarks are responsive thereto. Claims 1, 4-7, 9, 25, 26, 28-38 and 40-47 are pending. Applicants respectfully traverse the rejection in view of the following remarks.

Amendments to the Drawing

As requested by the Office Action, claim 1 has been amended to include the legend "Prior Art." In view of the amendment, the objection to the drawings is believed to be obviated and notification of same is respectfully requested.

Amendments to the Claims

Claims 25, 26 and 30 have been amended to clarify that the stylus input is being provided by a digitizing pen. No new matter was added.

Claim Amendments Suggested by the Office Action

Regarding the requested change of a digitizing pen to a stylus, while not agreeing that the claims were unclear, Applicants have amended claims 25, 26 and 30 to further clarify the intended scope. In view of the amendments, this ground of rejection is believed to be obviated.

The Office Action also suggested the terms "shift function," "control key function" and "alternate function" should be changed. However, Applicants respectfully submit that the term "Control key function" is supported by the specification as filed, pg. 15, and therefore does not lack clarity. The terms "shift function" and "alternate function" are also used throughout the specification (*see* specification as filed, pg. 5, for example) and, therefore, also do not lack clarity. In contrast, the terminology proposed by the Office Action was not expressly used in the specification. In addition, the Office Action's proposed claim terms are not recognized as standard terms of art while the current language would be readily understood by a person of skill in the art. Therefore, it seems that the proposed language would decrease the clarity of the pending claims. Accordingly, Applicants respectfully decline to make the suggested changes.

Rejection under 35 U.S.C. § 112, ¶ 1

Claims 1, 4-7, 9, 25, 26 and 28-47 were rejected under 35 U.S.C. § 112, ¶ 1 as failing to comply with the written description requirement.

In particular, the Office Action suggested that the feature “sending a mouse button event modified by the selected function” as recited in claim 1, for example, was not described in the specification as filed so as to reasonably convey that Applicants had possession of the claimed invention at the time of filing. The Office Action appears to be suggesting that there is no support for a mouse event being modified and that there is only support for sending a preprogrammed function. However, claim 1 recites “sending a mouse button event modified by the selected function.” Applicants note that there is no mention in any of the pending claims of, for example, the step of “modifying a mouse button in response to receiving a selected function.” In other words, as the claims do not recite a “mouse button event being modified,” Applicants respectfully assert the arguments in the Office Action that such a feature is not supported are simply not relevant to the pending claims.

Applicants respectfully submit that the specification as a whole more than adequately supports what is recited in the pending claims. As previously noted, that the specification as filed explains that “[t]he present invention also provides a way for an electromagnetic pen digitizer to precisely emulate the functional behavior of a two-button mouse-type computer input device.” (Specification as filed, pg. 5). The specification further explains that:

The functional behavior of a two-button mouse to be emulated by the pen and the MIP includes positional information, and an actuation signal for each button of the two buttons (i.e., left- and right- button down events). Also, two keyboard keys (SHIFT and CTRL) commonly used for modifying the functional behavior of the two buttons of mouse input device can be actuated using the MIP of the invention. Accordingly, an application program that is designed to operate with input from a two-button mouse input device and, therefore, expects a variety of mouse events can be operated using a digitizing pen without modification of the application program.

(Specification as filed, pg.12). Thus, the specification as filed makes it plain that aspects of the present invention allow a user to simulate the use of a conventional mouse, including the use of modifier keys such as the Shift key or the Control key, that are known to be used to modify the functional behavior of mouse buttons. The specification as filed, pg. 19, further explains that “an in-air gesture according to the present invention can be used for generating specific keystrokes, such as a space, backspace and carriage return, or user definable keystrokes and/or sequences of keystrokes.” As explained by MPEP 2163.07(a):

By disclosing in a patent application a device that inherently a function or has a property, operates according to as theory or has an advantage, a patent application necessarily discloses that function, theory or advantage, even though it says nothing explicit concerning it. The application may later be amended to recite the function, theory or advantage without introducing prohibited new matter.

Thus, for at least this reason alone the § 112 rejection cannot be properly maintained.

The specification further explains that in an embodiment, “the default event that is sent to an application when the pen touches the writing surface is a “left button down” event.” (Specification as filed, pg. 13). The specification also explains that when a UI element is displayed, the CTL, SHIFT, ALT and BULL’S-EYE may be displayed in the UI element. (Specification as filed, pg. 15). The specification further explains that the user may select one of the modifiers CTL, SHIFT and ALT and “[w]hen one or more of the modifiers CTL 302, SHIFT 303 and ALT 304 is active and a user taps in the pen tip within BULL’S-EYE 305, UI 300 sends a right click event plus the modifier(s) to the window immediately below BULL’S-EYE 305.” (Specification as filed, pg. 15). The specification further explains that “When a user taps on one of CTL 302, SHIFT 303 and ALT 304 buttons of UI 300, the selected button flashes, thereby indicating activation. On the next pen down on, for example, a soft keyboard button or any area outside MIP window, UI 300 sends the modified mouse message and deactivates the modifier.” Applicants respectfully submit that in view of this, it is hard to understand how the Office Action can suggest such a feature is not supported by the specification as filed.

The Office Action, apparently ignoring the above section, suggested that the following portion suggested that left button down event was not disclosed:

Preferably, the default event that is sent to an application when the pen touches the writing surface is a “left button down” event. When the pen touch is preceded by a selected in-air gesture, no “left button down” event is sent. Instead, the UI is displayed preferably near the pen tip.

(Specification as filed, pg. 13-14). However, Applicants respectfully submit that the Examiner cannot properly rely on a single portion of the specification while ignoring the rest on the specification. Furthermore, this section is merely discussing an embodiment where the predetermined gesture can trigger the displaying of the UI element. In addition, this section does not support the Office Action’s position because it merely says that a selected in-air gesture will not cause a left button event. Logically, there is no support for the suggestion that because a

selected in-air gesture does not cause a left button event, it necessarily follows that all in-air gestures will have the same effect. Rather, such a suggestion is contrary to the teaching of the specification as filed. Applicants respectfully submit that the Office Action's proposed reading of the selected sentence ignore the rest of the specification and such a reading is unsupported by any statutory authority or case law that Applicant's representatives are aware of.

Regarding claim 45, support for "responsive to determining that the predetermined gesture made by the user does not precede the stylus input, generating a left button mouse event" is at least found in the specification as filed, pg 15, which states:

When a user taps the pen tip in the BULL'S-EYE 305, and none of CTL 302, SHIFT 302 and ALT 304 is active, UI 300 sends a right button click event to the window immediately below BULL'S-EYE 305. UI 300 then disappears from view. When one or more of the modifiers CTL 302, SHIFT 303 and ALT 304 is active and a user taps in the pen tip within BULL'S-EYE 305, UI 300 sends a right click event plus the modifier(s) to the window immediately below BULL'S-EYE 305.

Applicants note that a person of skill in the art would appreciate from this portion of the specification that a determination would be made prior to sending the modified message. Furthermore, the use of the lock-out timer as discussed on pg. 15 of the specification as filed provides further support that this feature is supported by the specification as filed.

In summary, Applicants respectfully submit that the above cited sections more than adequately convey that the Applicants were in possession of the claimed subject matter at the time of filing. Accordingly, withdrawal of this ground of rejection is respectfully requested.

Rejection under 35 U.S.C. § 102(e) – Matthews

Applicants note that present application claims priority to U.S. Provisional Application Serial No. 60/247,843, which was filed November 10, 2000 (the '843 application). As the specification of the '843 provisional application is substantially the same as the specification of the present application and the provisional application fully supports the pending claims, the present application has a priority date that precedes the filing date accorded to U.S. Patent No. 6,903,730 to Matthews *et al.* (Matthews) under 35 U.S.C. § 102. Accordingly, Matthews cannot be considered prior art with respect to the current application and withdrawal of this ground of rejection is respectfully requested.

Rejection under 35 U.S.C. § 103(a) - Akiyama

Claims 5 and 6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,018,336 to Akiyama (Akiyama).

Independent claim 5 recites “displaying a user interface having a plurality of selectable functions including at least one function selected from the list consisting of a shift function, a control key function, and an alternate function.” The Office Action admits that Akiyama fails to disclose this feature but suggests that Akiyama, C. 6, L. 1-2 makes it obvious to use selectable key functions. This selective reading of Akiyama, however, is not supportable. The cited section of Akiyama is provided below:

However, the other mouse functions can be emulated by increasing the selection button of the other mouse functions.

Akiyama, C. 6, L. 1-2. Applicant’s note that the meaning of this passage is less than what was suggested by the Office Action, as shown by the preceding portion of Akiyama:

According to the above-mentioned processing, only the movement of the mouse cursor and the click of the right-side mouse button can be emulated by only the operation on the pressure sensitive tablet 14. 60

The above embodiment explained that the emulation of only the movement of the mouse cursor and the click of the right-side mouse button could be executed among the mouse functions with which the general-purpose OS 121 dealt. 65

Akiyama, C. 5, L. 60-67. Thus, when read in context, the cited portion of Akiyama at most teaches the ability to provide a left and right click and completely fails to suggest, teach or provide any disclosure relating to the use of a modifier with a right or left click of a mouse.

Claim 6 depends from claim 5 and is not obvious for at least the reasons that claim 5 is not obvious and for the additional features recited therein. For example, claim 6 recites “receiving a user selection for the bull’s-eye function” and “sending a right-button event to an application in response to the user selection for the bull’s-eye function.” While the Office Action generally suggests that Akiyama discloses a bulls-eye function, Applicants have been unable to locate this function in Akiyama. Plainly, if Akiyama fails to actually disclose such a function, Akiyama cannot be said to disclose the features of claim 6. Thus, the rejection of claim

6 is not supported. Applicants further note that the present application also discloses a right click function, thus the right click function of Akiyama cannot be equated with the recited bull-eye function but at most can be equated with the right click function of the present application (the Office Action has provided no support for the suggestion that the right-click button of Akiyama discloses the features of the bulls-eye function explained on page 15 of the specification as filed).

Accordingly, withdrawal of this ground of rejection is respectfully requested.

Rejection under 35 U.S.C. § 103(a) – Akiyama & Moran & Levine & Beernink

Claims 1, 4, 7, 9, 25, 26, 28-38, and 40-47 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Akiyama in view of U.S. Patent No. 5,500,935 to Moran *et al.* (Moran), either alone or in further combination with U.S. Patent No. 5,625,833 to Levine *et al.* (Levine) or U.S. Patent No. 5,612,719 to Beernink *et al.* (Beernink). Claims 1 and 32 are independent.

Regarding independent claim 1, a feature similar to the feature discussed above with respect to claim 5 is recited in claim 1. Therefore, for reasons similar to the reasons discussed above with respect to claim 5, Akiyama fails to disclose the feature of “displaying a user interface having a plurality of selectable functions including at least one function selected from the list consisting of a shift function, a control key function, and an alternate function.” The Office Action has not suggested that Moran or any of the other references of record correct the above noted deficiency. Thus, the references of record fail to support a *prima facie* case of obviousness for at least the reasons discussed above with respect to claim 5.

In addition, claim 1 recites “determining whether the stylus input is preceded by a predetermined gesture made by the user.” The Office Action admits this is not present in Akiyama but suggests it would be obvious to modify Akiyama in view of Moran. However, the inherent argument made by the Office Action is incorrect. One can readily provide a gesture which triggers a pop-up menu, for example, and then provide an input on the pop-up menu without the need to determine whether the input on the pop-up menu was preceded by something.

More importantly, however, the motivation to make such a combination does not exist. Akiyama discloses providing an icon that can be selected and once selected, causes a window to pop up. The window and icon are stationary. Thus, there would be no reasons to check for a

predetermined gesture because the user would either actuate the icon or not. Accordingly, for this additional reason the references of record fail to support a *prima facie* case of obviousness.

Claims 4, 7, 9, 25-26, 28-31 and 45-46 depend from claim 1 and are patentable over the references of record for at least the reasons discussed above and for the additional features recited therein. For example, claims 25-26 recite a feature similar to the feature “displaying step displays said user interface at a location on a digitizing writing surface that depends upon a location of the digitizing pen” recited in claim 25. While admitting that Akiyama fails to disclose this, the Office Action suggests it would be obvious to use the teaching of Moran to modify Akiyama. However, Applicants respectfully submit that such a modification does not make sense. Akiyama discloses an icon that when selected provides a menu. Nothing in Akiyama or Moran suggests that the icon should be moved around, indeed the Office Action admits the icon is static; therefore there is no reason to change the position of the resultant pop-up menu. Indeed, by moving the pop-up menu the user would actually have to travel further from the point where the icon was selected to the pop-up menu. Thus, the Office Action’s reasoning cannot be said to support modifying Akiyama with Moran to reach the claim features. In other words, there can be no motivation to use the feature of Moran with Akiyama when Akiyama fails to provide a reason to use the feature in the first place. Thus, a person of skill in the art would have had no motivation to use the teaching of Moran to modify Akiyama and no expectation of success if it was tried. Applicants further note that while this deficiency in the rejection was previously pointed out, the Office Action failed to address this issue.

In addition, claim 46 recites the feature of “wherein the stylus input is a tap.” If the Office Action suggests that tapping on the icon is the stylus input, then there is no reason to check for a predetermined gesture because Akiyama discloses that simply tapping on the icon causes the pop-up menu to appear. Indeed, Applicants cannot find any reason disclosed by Akiyama or Moran that would provide support for the concept of checking for a predetermined gesture once the user taps on the icon disclosed in Akiyama. This is because Akiyama automatically displays the pop-up menu when the user taps on the icon and any check for a predetermined gesture would appear to be pointless based on the disclosure of Akiyama and Moran.

In addition, the portion of Moran, Col. 2., Ln. 10-14 that is suggested to disclose the predetermined gesture before a stylus input is not compatible with the features of claim 46.

Thus, even if there was some motivation to use Moran to modify Akiyama, Moran plainly fails to disclose a predetermined gesture before a tap input and instead at most discloses a gesture that ends with the stylus being lifted. A predetermined gesture and a tap cannot be equated with a drag and lift, thus this feature is not disclosed by the references of record. Applicants note that while this argument was previously made, the Office Action has failed to address this deficiency in the rejection of claim 46.

Independent claim 32 recites the features of “determining whether the first stylus input is preceded by a particular in-air gesture” and “responsive to determining that the first stylus input is preceded by the particular in-air gesture, displaying a graphical user interface including a user-selectable keyboard function.” The Office Action admits that Akiyama fails to disclose the stylus input preceded by a predetermined in-air gesture, thus Akiyama necessarily cannot disclose these steps. Looking at Moran, Applicants have been unable to locate any mention of in-air gestures. The Office Action suggested, however, that Levine discloses in-air gestures (in reference to now cancelled claim 39). However, Applicants respectfully submit that the addition of Levine does not help the Office Action’s position.

As an initial matter, nothing in Akiyama supports modifying the process disclosed by Akiyama to perform these two steps, even if one assumes that Levine does disclose in-air gestures. This is because Akiyama discloses providing an icon that, when selected, causes a pop-up menu to be displayed. Therefore, there is no reason to check what was done before the icon was selected because there is no need to determine whether the pop-up menu should be displayed; instead selecting the icon by itself automatically causes the pop-up menu to be displayed. Conversely, if the icon is not selected, the pop-up menu is not displayed. Therefore, any attempt to modify the icon selection process disclosed by Akiyama to reach the subject matter claimed in claim 32 does not make sense. Indeed, Applicants cannot find anything in any of the cited references that provides any support for modifying the icon selection process of Akiyama by first checking to see if a predetermined gesture was made prior to the icon being selected. Instead, Akiyama discloses providing an icon that, if selected, will cause a pop-up menu to be displayed. Therefore, it is unclear from the disclosure of Akiyama, Moran or Levine how or why one should or could modify the system of Akiyama.

Furthermore, Applicants have been unable to find anything in any of the cited references that discloses checking whether a predetermined in-air gesture preceded a stylus input. Levine

fails to disclose such a step and merely discloses that in-air gestures exist. The Office Action appears to be suggesting that Akiyama can be modified by Moran, once Moran is modified by Levine. However, Applicants respectfully submit that such a tiered modification of references (using A to modify B and then using the modified B to modify C) is improper and contrary to established precedent that allows an obviousness type rejection by using a base reference and modifying the base reference with other references. Furthermore, the Office Action has provided no support for making such a double modification, even if it was proper. For example, it is unclear how the gesture referenced in Col. 2, Ln. 10-14 of Moran could be replaced with a predetermined in-air gesture because then lifting the stylus off the contact surface would not be possible. Instead, Applicants respectfully submit that it is only with improper hindsight reconstruction that the references can be combined to reach the present invention and even then the combination does not make sense because there is no reason to check for predetermined gestures when an icon is provided as disclosed by Akiyama. Therefore, for at least the above reasons the references of record fail to disclose all the features of claim 32, therefore the references of record cannot be said to support a *prima facie* case of obviousness. Accordingly, claim 32 is patentable over the references of record.

Claims 33-38, 40-44 and 47 depend from claim 32 and are therefore nonobvious in view of the references of record for at least the above reasons discussed with respect to independent claim 32 and for the additional features recite therein. For example, claim 37 recites "wherein the first stylus input is a tap of the stylus on a touch-sensitive display." Even if the Office Action could somehow support the modification of Akiyama with Moran and Levine, the Office Action is suggesting that the predetermined gesture before the stylus input is the gesture referred to in Col 2, Ln. 10-14 of Moran that occurs before the stylus is lifted. Plainly, however, if the first stylus is a tap, than Moran fails to disclose this feature because this section of Moran does not disclose a gesture preceding a tap stylus input and therefore cited references cannot be said to support a *prima facie* case of obviousness for this additional reason.

Accordingly, withdrawal of this ground of rejection is respectfully requested.

CONCLUSION

All objections and rejections having been addressed, Applicants submit that the instant application is in condition for allowance, and respectfully request prompt notification of the same. Should the Examiner feel that a telephone call would expedite prosecution, the Examiner is invited to contact the undersigned at the number below.

Respectfully submitted,

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